

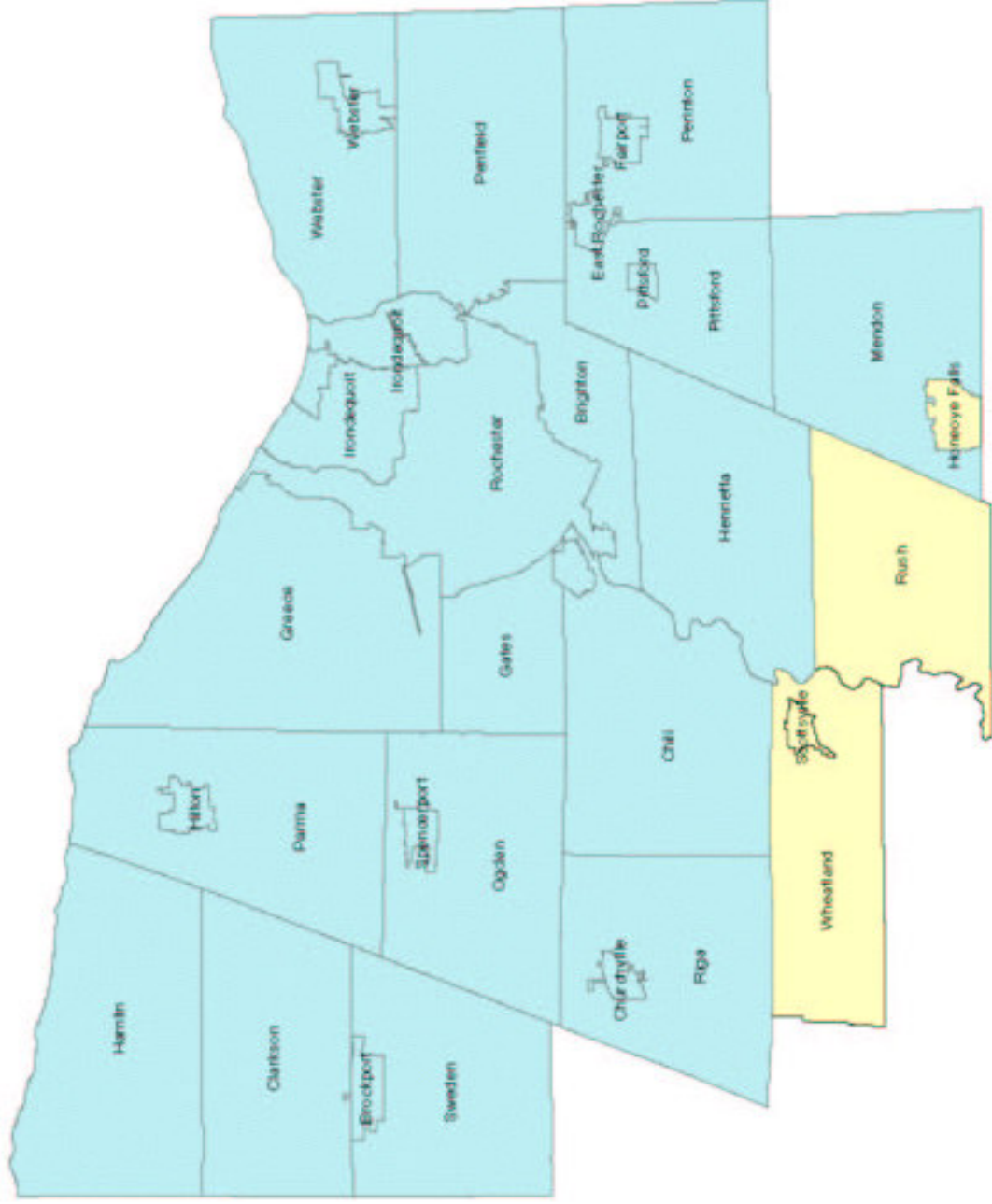
# Presentation Outline

- **Monroe County Stormwater Coalition**
- **Phase II Storm Program**
- **Annual Report**
- **Education / Public Participation Opportunities**

# Monroe County Stormwater Coalition

- **An intergovernmental Partnership**
- **Municipalities, Non-traditional MS4 and Partnering Agencies**





## Stormwater Coalition Members

-  Stormwater Coalition Members
-  Non-members

# THE STORMWATER COALITION OF MONROE COUNTY MEMBERS

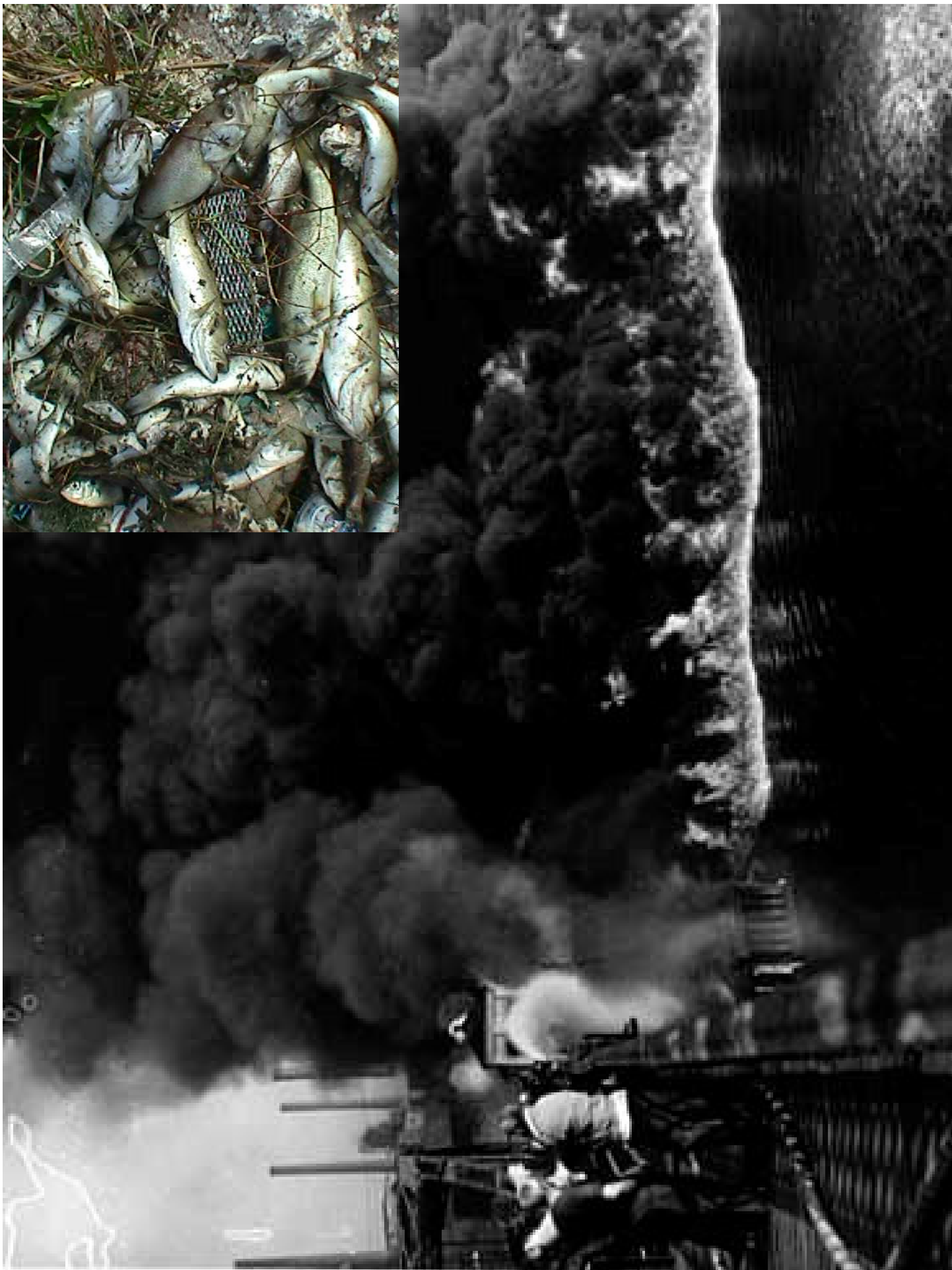
TOWNS: BRIGHTON, CHILI, CLARKSON, GATES, GREECE, HAMLIN, HENRIETTA, IRONDEQUOIT, MENDON, OGDEN, PARMA, PENFIELD, PERINTON, PITTSFORD, SWEDEN, WEBSTER, WHEATLAND.

VILLAGES: BROCKPORT, CHURCHVILLE, EAST ROCHESTER, FAIRPORT, HILTON, PITTSFORD, SPENCERPORT, WEBSTER.

AGENCIES: CITY OF ROCHESTER PURE WATERS DISTRICT IN CONJUNCTION WITH MONROE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, MONROE COUNTY DEPARTMENT OF TRANSPORTATION.

SUNY Brockport

# Phase II Storm Program



[illegible]

## State Pollutant Discharge Elimination System (SPDES)

**\*water pollution control act**



# \$ Funding For Clean Water



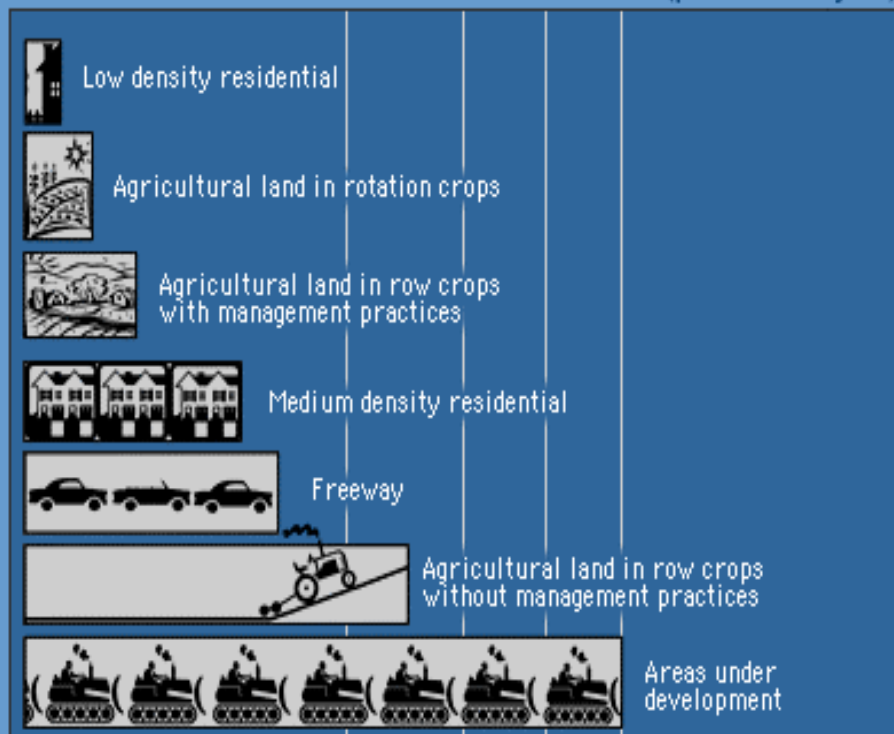


### Typical suspended sediment load for different land uses

2200 4400 6600 8800 (pounds/acre/year)

Land Use

Increasing Intensity



Typical Sediment load. Credit: Wisconsin DNR

**Lawsuits,  
Studies and  
Regulation**

# 1987 CWA

## Amendment: Stormwater

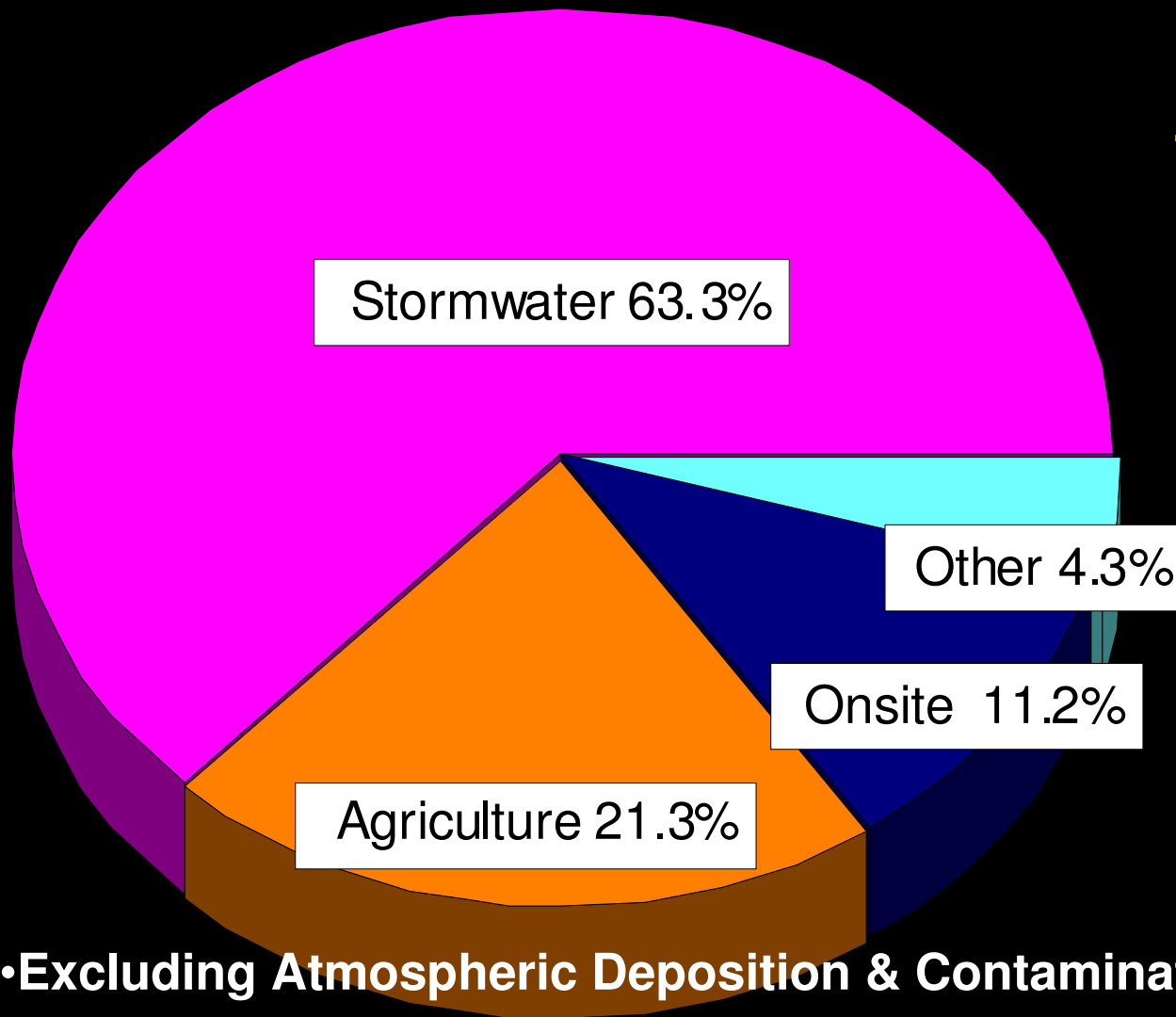
Revisions added STORMWATER

as a pollutant (Nonpoint source) that could be covered under a “general” permit

(vs. individual permits for point sources)

# Stormwater runoff is

**the largest  
source of  
pollution  
to NY  
State's  
waters.**



•Excluding Atmospheric Deposition & Contaminated Sediments

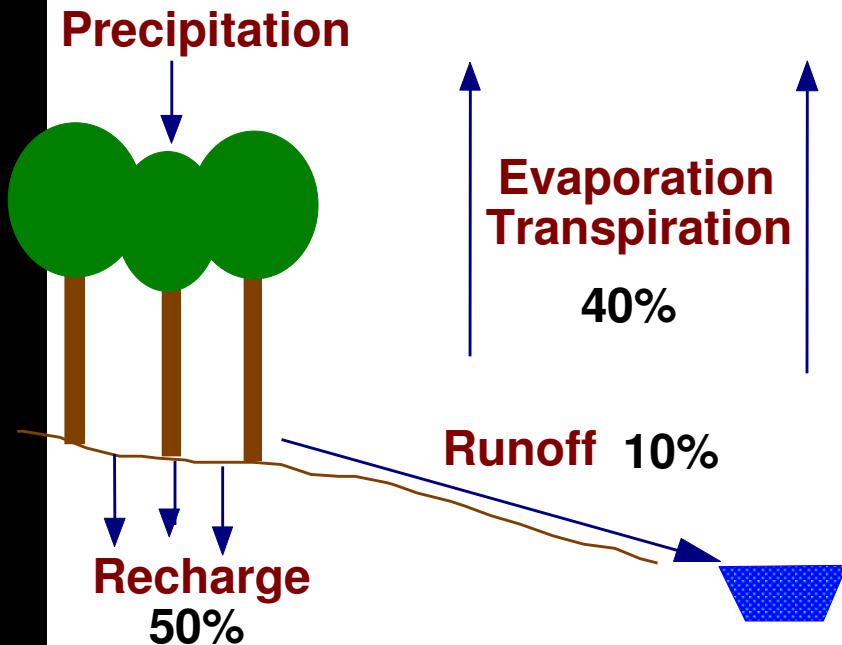
# Stormwater Runoff is

Rain or snowmelt that flows over land or rooftops, paved areas, bare soil and lawns – picking up pollutants.

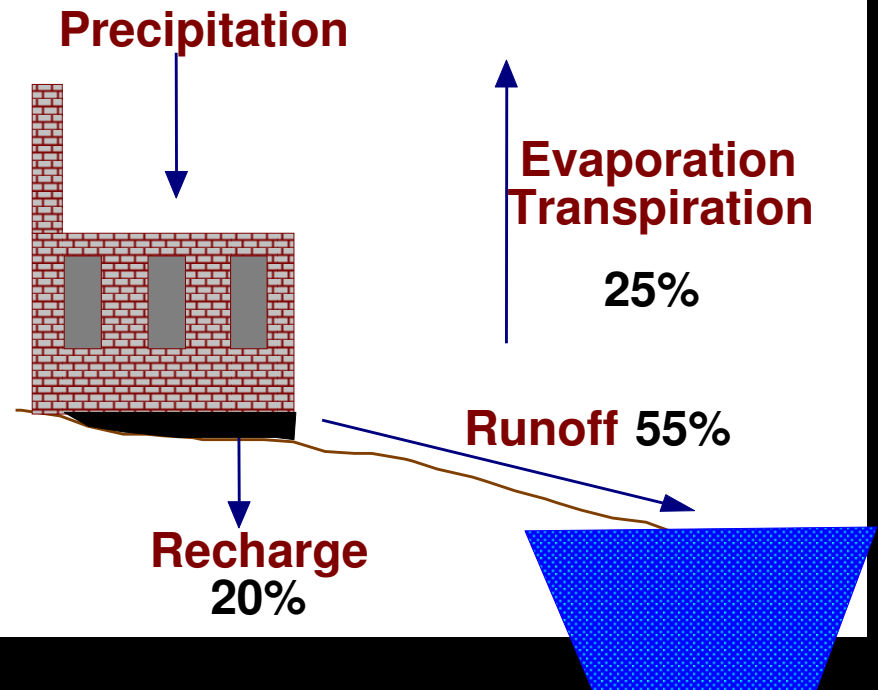


**Stormwater runoff is a natural part of the hydrologic cycle ... however as land is developed, runoff increases.**

### Undeveloped Conditions



### Highly Developed Conditions

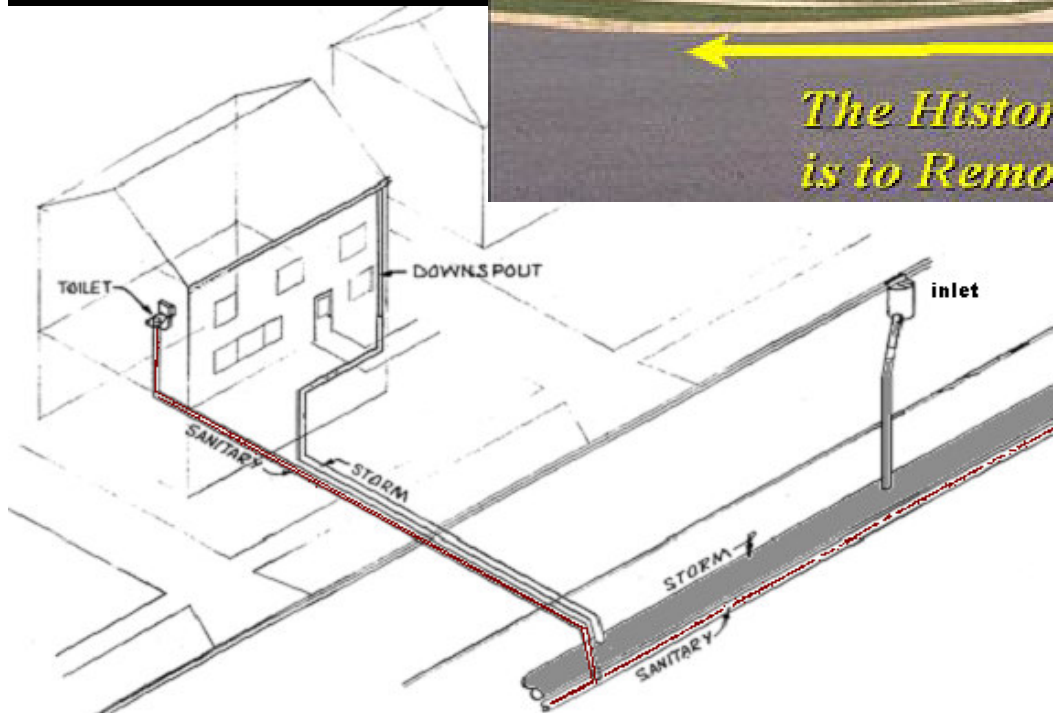




# “Good Drainage” Paradigm

*The Problem is Conventional Site Design*

*Efficient  
Collect  
Concentrate  
Convey  
Discharge*



# **Effects of Development on Streams-**

## **A chain of events...**

- **Increased flood peaks, more frequent flooding and elevated floodplains**
- **Decrease in groundwater recharge - lower dry weather flows in streams**
- **Increased bankfull flows and subsequent streambank erosion**
- **Loss of Habitat Structure**



# **Regulatory History: EPA Stormwater Program**

- **Phased approach required by the 1987 Amendments to the Clean Water Act**
- **Phase I addressed:**
  - **Facilities permitted before 1987**
  - **Certain Industrial Activities**
  - **Medium and Large Municipalities**
  - **Construction Activities > 5 acres**
- **Phase II left to address other sources**

# Phase I Covered:

- **Large and Medium MS4s:**
  - **Large: >250,000**
  - **Medium: 100,000-249,999**



# **Phase I**

## **Large Construction**

- **Applied to construction activity disturbing > 5 acres**
- **Also applied to activities less than 5 acres if part of a common plan of development or sale which collectively would disturb more than 5 acres.**

# Phase II Final Rule

- Signed on October 29, 1999
- Published in the Federal Register on December 8, 1999
- Rule and fact sheets available at:
  - [www.epa.gov/owm/sw/phase2](http://www.epa.gov/owm/sw/phase2)



**Phase II:  
Small Municipal  
Separate Storm Sewer  
Stormwater Program**

## Municipal Separate Storm Sewer System (“MS4”) Definition:

- “A conveyance or system of conveyances owned by a State, City, Town, Village, or other public entity that discharges to the Waters of the United States and is:**
- designed or used to collect or convey stormwater (includes gutters, pipes, ditches)**
  - not a combined sewer**
  - not part of a Publicly Owned Treatment Works (i.e. sewage treatment plant)”**

# Phase II

- **Addresses “Small” MS4s**
- **These are defined as:**
  - **Any MS4s that are not already designated and regulated as large or medium under Phase I. (i.e. those less than 100,000 in population)**



# **Regulated Small MS4**

## **Definition:**

- **Any Small MS4 which is:**
  - **located in an “Urbanized Area” and/or**
  - **“designated” by DEC**



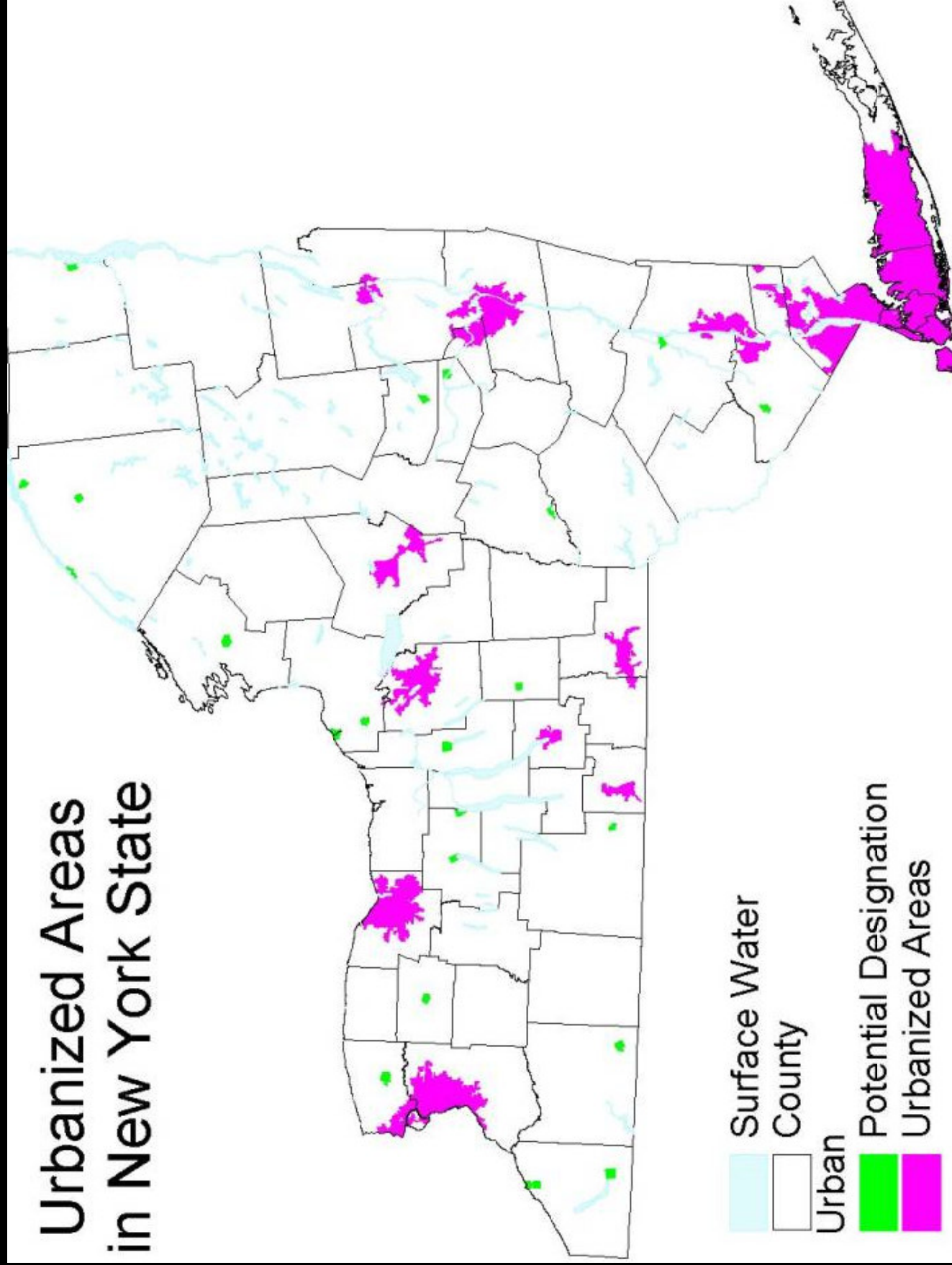
# Regulated MS4s

## Include:

- **357 Municipal Governments (“Automatic”)**
- **??? Municipal Governments (TBD\*)**
- **“Misfits”**
  - **DOT, Thruway, County Highway Departments,**
  - **Other State agencies, authorities**
  - **Airports, State and community colleges**
  - **Post offices, VA hospitals, military bases, prisons**
  - **Water, sewer, and other special districts**

**\* TBD: To be determined**

# Urbanized Areas in New York State



# Potential Designation Criteria

- **123.35(b)(1)(ii) - “EPA’s recommends a balanced consideration of the following designation criteria on a watershed or local basis:**
  - **Discharges to sensitive waters;**
  - **High growth or growth potential;**
  - **High population density;**
  - **Contiguous to an urbanized area;**

# Requirements of MS4 Permits

- **Six Minimum Control Measures:**
  - **Public Education and Outreach**
  - **Public Involvement and Participation**
  - **Illicit Discharge Detection and Elimination**
  - **Construction Site Runoff Control**
  - **Post-Construction Stormwater Management**
  - **Pollution Prevention / Good Housekeeping for Municipal Operations**

# Public Education & Outreach:

- **Distribute information that describe the impacts of stormwater and actions to reduce pollution**
- **Informs the public of actions they can take to eliminate or reduce pollution from their properties**
- **Should direct information to specific targeted groups (e.g. commercial, industrial, and residential areas)**
- **Address viewpoints and concerns of all sub-communities (e.g. business, minorities, developers)**

# Public Involvement/ Participation

- **Must comply with State & Local public noticing requirements for ordinances, local laws, SEQRA, etc.**
- **Should involve the public in developing, implementing and reviewing the MS4's stormwater management program**
  - **Reach out to and engage all ethnic and economic groups**
  - **Allow citizens to have meaningful input in the decision-making process**
  - **Hold public hearings**
  - **Work with volunteers**

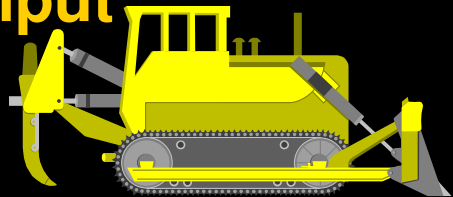
# Illicit Discharge Detection and Elimination Requirements

- **Develop maps that show the system of pipes and outfalls to receiving waters, and areas of concentrated activities**
- **Prohibit illicit discharges into the system by ordinance or other means**
- **Implement a plan to detect and address these discharges**
- **Inform the public as to the hazards and consequences of illicit discharges**



# Construction Site Runoff Control

- **Must develop, implement and enforce a program to reduce pollution from construction activities by ordinance or other means**
- **Program must include:**
  - Requirements for owners to implement BMPs
  - Pre-construction review of plans
  - Procedures to consider public input
  - Inspections during construction
  - Penalties to ensure compliance



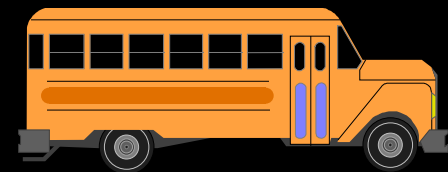


# Development/ Redevelopment

- **Must develop a program to address stormwater runoff from new or redeveloped areas**
- **Program must:**
  - **Include a plans to implement site-appropriate, cost-effective structural and non-structural BMPs**
  - **Ensure long-term operation and maintenance of BMPS**
  - **Ensure controls are in place to prevent or minimize water quality impacts**

# Pollution Prevention/ Good Housekeeping

- **Must develop and implement a cost effective operation and maintenance program to reduce pollutant runoff from municipal operations**
- **Must include employee training including:**
  - **Park and open space management**
  - **Fleet maintenance**
  - **Building maintenance**
  - **Stormwater system maintenance**

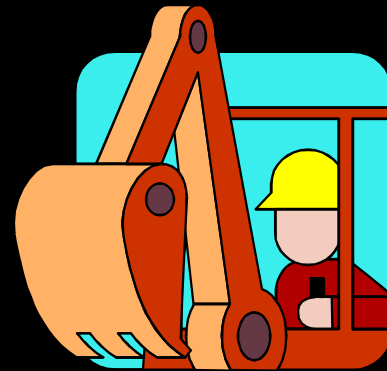


# Pollution Prevention/ Good Housekeeping

- **Must consider :**
  - Maintenance activities and scheduled
  - Controls to reducing/eliminating pollutants from parking lots, storage areas and waste transfer facilities
  - Procedures for proper disposal of waste materials removed from storm drains
  - Inspection procedures for controls to reduce floatables and other pollutants



# Phase II Small Construction Program



# Phase II

## Small Construction

- **Applies to:**
  - **Activities greater than or equal to 1 acre of disturbance**
  - **Activities less than one acre if part of a common plan of development or sale which would disturb more than one acre**
  - **Certain activities of less than one acre if designated by DEC based on water quality impacts**

# Interaction between DEC & MS4 Construction Programs

- **DEC Program**
  - Administered by DEC
  - Requires permit coverage, regardless of whether MS4 has program (duplication)
- **MS4 Program**
  - Must meet MS4 requirements
  - Covers discharges to the MS4 system
  - Discharges directly to waterways from construction site are not automatically covered



# Time line

- **Dec. 2002: DEC must:**
  - issue Small MS4 permit(s)
  - designate additional Small MS4s.
- **March 2003: MS4s must:**
  - If regulated, file NOIs for their municipal programs
  - File NOIs for construction activities > 1acre
- **March 2008: Phase II fully implemented**
  - If regulated, have 6 point programs operational

# Annual Report



# NYSDEC Permit GP-02-02

## Annual Report

- “The MS4 must take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard, and the MS4 must document these actions in the stormwater management plan.”
- “Develop, implement, and enforce a stormwater management program to reduce the discharge of pollutants to the *maximum extent practicable*.”

# Annual Report Compliance

- Prior to submitting the annual report, present the draft at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report.

# 2005 – 2006 Report

## PUBLIC EDUCATION AND OUTREACH

- **Water Education Collaborative (WEC)**
  - Presentations at local schools.
  - Exhibits at community events with water quality component.
- **Cornell Cooperative Extension School Events and *Great Lakes/Great Lawns* program.**
- **Monroe County's Household Hazardous Waste Collection Program.**

# 2005 – 2006 Report

## PUBLIC INVOLVEMENT/PARTICIPATION

- Public meeting for Annual Report.
- Community Water Watch Program.
- International Coastal Clean Up Day.
- Local Conservation Boards, Environmental Protection Boards, and Watershed Management Committees.

# 2005 – 2006 Report

## PUBLIC INVOLVEMENT/PARTICIPATION



# 2005 – 2006 Report

## ILLICIT DISCHARGE DETECTION/ELIMINATION

- Illicit Discharge Task Group meets monthly, coordinates activities.
- IDDE training session for municipalities.
- Monroe County's Adopt an Outfall Program.
- Mapping and inspection of outfall structures.
- Development of plans to identify illicit connections.

# 2005 – 2006 Report

## CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- made changes to the construction and post-construction model ordinances developed by the Coalition
- Education efforts to train municipalities , contractors, developers, and engineers.
- Sponsored Workshops for MS4 staff on construction management and model ordinance.
- in-field training sessions for MS4 inspection staff on construction site inspections



# 2005 – 2006 Report

## CONSTRUCTION SITE STORMWATER





# 2005 – 2006 Report

## POST CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- Construction Task Group's Model Ordinance.
- Development of best management practices for municipal operations.
- A maintenance agreement and a stormwater facility inspection form have been developed
- Educate and train municipal field staff.

# 2005 – 2006 Report

## POLLUTION PREVENTION & GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

- Training program for Roadway Stormwater Management BMP's.
- Develop inspection check list for municipal operations.
- Review storm network maintenance measures.

# 2005 – 2006 Report



# 2005 – 2006 Report

## CITIZEN INPUT

- Review draft Annual Permit (Town, Village, County).
- Final Report due at NYSDEC Albany offices by June 1, 2006.
- GET INVOLVED!!!!

# Education / Public Participation Opportunities